

## ***Alnus serrulata* - *Xanthorhiza simplicissima* Shrubland**

COMMON NAME Smooth Alder - Yellowroot Shrubland  
SYNONYM Rocky Bar and Shore (Alder-Yellowroot Type)  
PHYSIOGNOMIC CLASS Shrubland (III)  
PHYSIOGNOMIC SUBCLASS Deciduous shrubland (III.B)  
PHYSIOGNOMIC GROUP Cold-deciduous shrubland (III.B.2)  
PHYSIOGNOMIC SUBGROUP Natural/Semi-natural (III.B.2.N)  
FORMATION Temporarily flooded cold-deciduous shrubland (III.B.2.N.d)

ALLIANCE *Alnus serrulata* Temporarily Flooded Shrubland Alliance

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM Palustrine

### RANGE

#### **Globally**

This community is found in the Blue Ridge escarpment gorges and ranges into the Cumberland Plateau. It is known from Kentucky, North Carolina, South Carolina, and Tennessee.

#### **Great Smoky Mountains National Park**

This association was not observed or sampled on the Mount Le Conte or Cades Cove quadrangles, but it is likely in the Park.

### ENVIRONMENTAL DESCRIPTION

#### **Globally**

These riverine shrublands are found on rocky or gravelly substrates along narrow river margins.

#### **Great Smoky Mountains National Park**

No information

### MOST ABUNDANT SPECIES

#### **Globally**

Stratum Species

No information

#### **Great Smoky Mountains National Park**

Stratum Species

No information.

### CHARACTERISTIC SPECIES

#### **Globally**

*Alnus serrulata*, *Xanthorhiza simplicissima*, *Leucothoe fontanesiana*, *Carpinus caroliniana*, *Diospyros virginiana*, *Liquidambar styraciflua*, *Liriodendron tulipifera*, *Platanus occidentalis*, *Tsuga canadensis*

#### **Great Smoky Mountains National Park**

No information

### VEGETATION DESCRIPTION

#### **Globally**

Vegetation composition, density, and height vary with frequency of flooding, substrate, and soil depth. *Alnus serrulata* and *Xanthorhiza simplicissima* are common and characteristic. Other shrubs may include *Arundinaria gigantea*, *Diervilla sessilifolia*, *Salix* (*nigra*, *sericea*), *Rhododendron* (*arborescens*, *viscosum*, *maximum*, *periclymenoides*), *Kalmia latifolia*, *Leucothoe fontanesiana*, *Itea virginica*, and *Viburnum nudum* var. *cassinoides*. Arborescent species that occur as tall shrubs (or as occasional trees, less than 10 percent cover) include *Acer rubrum*, *Carpinus caroliniana*, *Diospyros virginiana*, *Liquidambar styraciflua*, *Liriodendron tulipifera*, *Platanus occidentalis*, and *Tsuga canadensis*. Open areas dominated by grasses and forbs include species such as *Agrostis perennans*, *Boykinia aconitifolia*, *Carex torta*, *Holcus lanatus* (exotic), *Lycopus virginicus*, *Trautvetteria caroliniensis*, *Houstonia serpyllifolia*, *Impatiens capensis*, *Hypericum mutilum*, *Viola primulifolia*, and *Eupatorium fistulosum*. Adjacent alluvial forests are dominated by *Tsuga canadensis*, *Liriodendron tulipifera*, *Betula lenta*, and, at lower elevations below 600 meters (2000 feet), *Platanus occidentalis* and *Liquidambar styraciflua*.

***Great Smoky Mountains National Park***

No information

OTHER NOTEWORTHY SPECIES

No information

CONSERVATION RANK                      G3

RANK JUSTIFICATION

DATABASE CODE                      C EGL003895

COMMENTS

***Globally***

This community is often associated with *Carex torta*-dominated vegetation.

***Great Smoky Mountains National Park***

REFERENCES

Nelson 1986, Newell and Peet 1995, Schafale and Weakley 1990